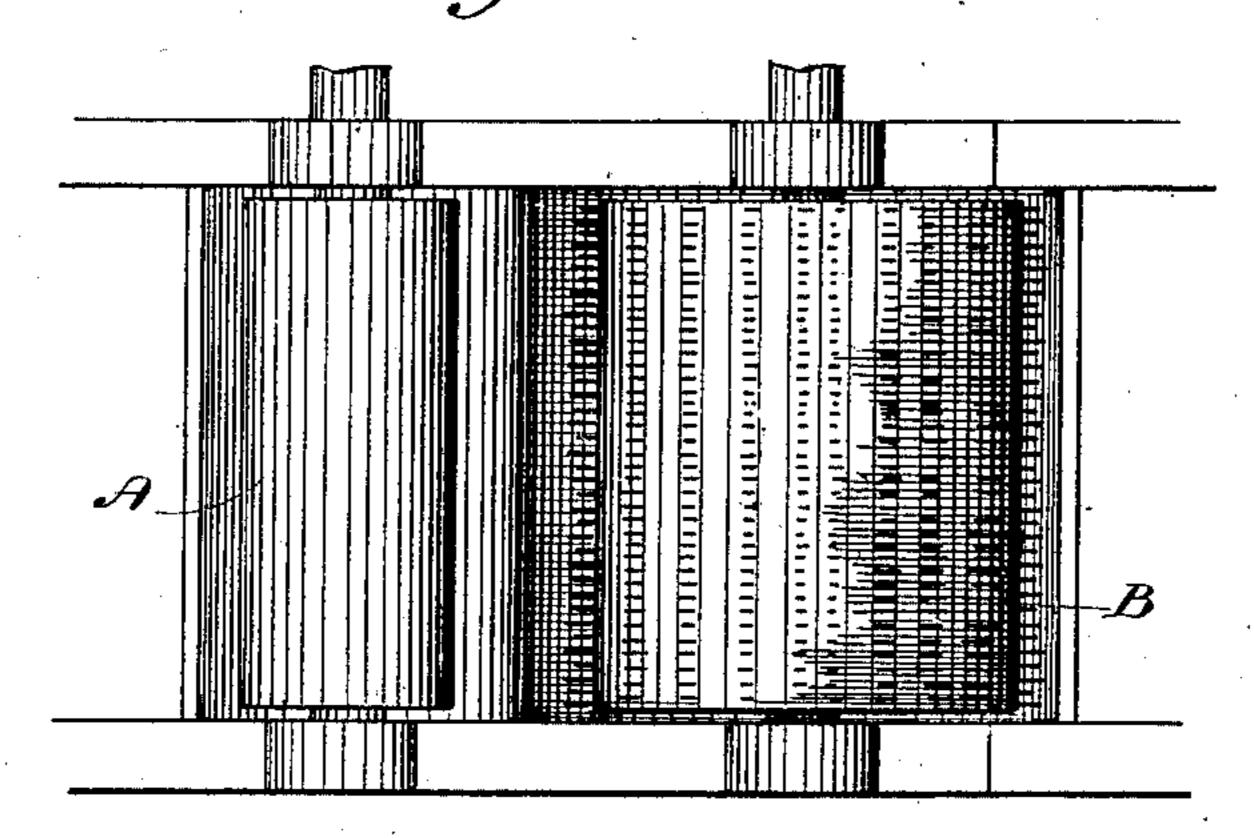
(No Model.)

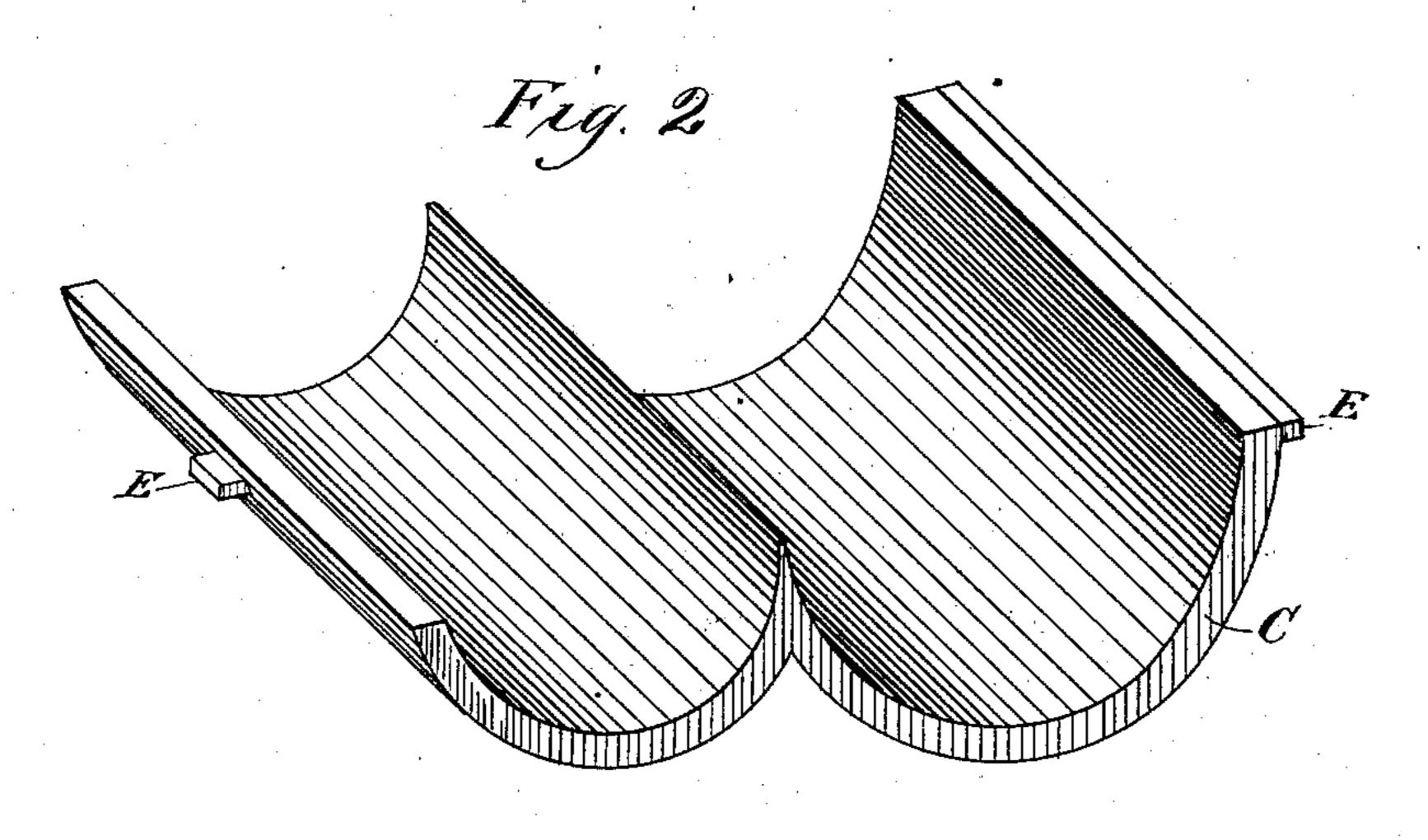
## C. LAKE.

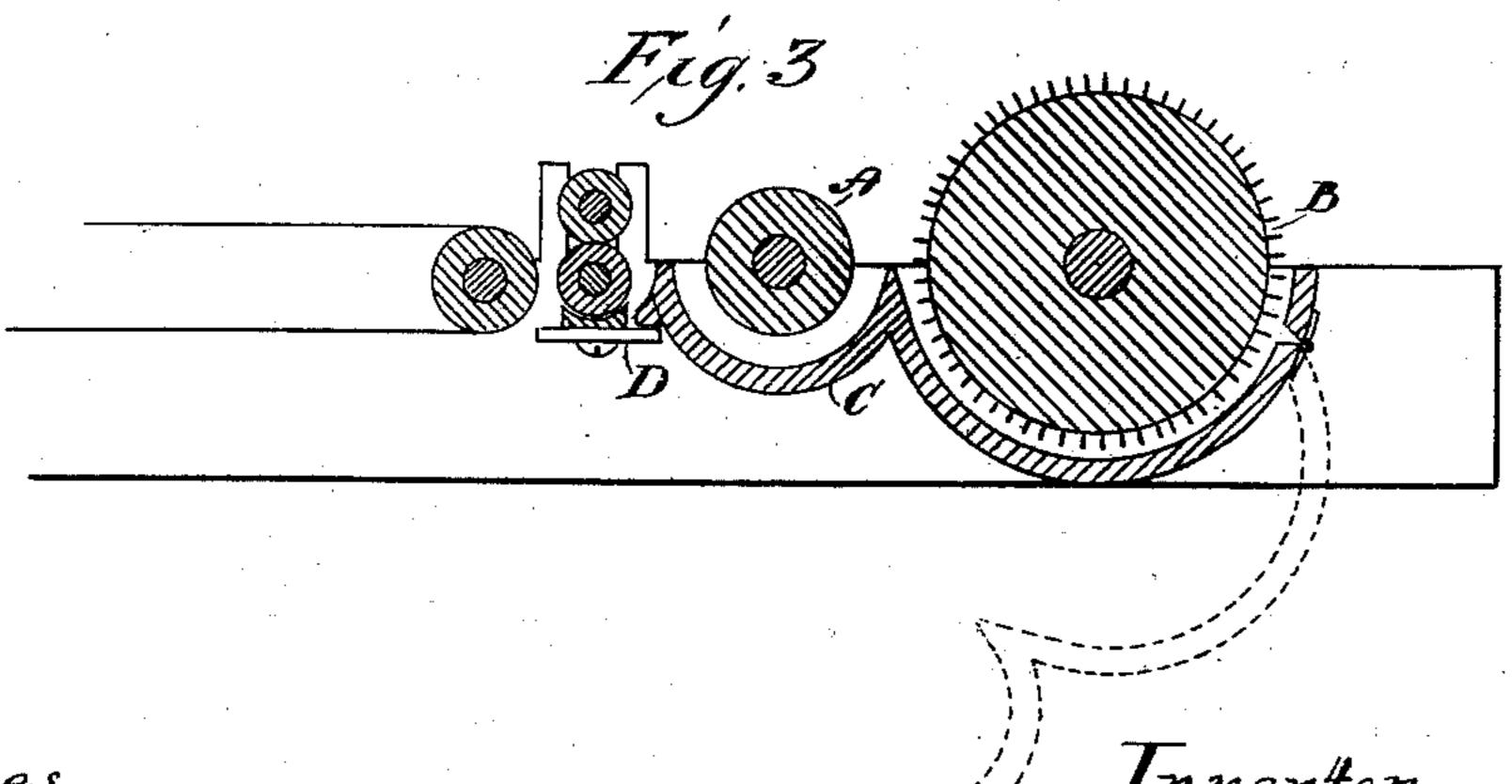
## MOVABLE BOTTOM FOR HAT MACHINES.

No. 279,772.

Fig. 1 Patented June 19, 1883.







Witnesses SSMmson M.Smith Inventor
Charles Lake
By Woosterr Smith

Stilys.

## United States Patent Office.

CHARLES LAKE, OF DANBURY, CONNECTICUT.

## MOVABLE BOTTOM FOR HAT-MACHINES.

SPECIFICATION forming part of Letters Patent No. 279,772, dated June 19, 1883.

Application filed May 1, 1883. (No model.)

To all whom it may concern:

Be it known that I, CHARLES LAKE, a citizen of the United States, residing at Danbury, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Movable Bottoms for Hat-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which appertains to make and use the same.

My invention relates to certain novel and useful improvements in the construction of machines for the manufacture and forming of 15 hat-bodies, and has for its object to provide such a machine in which the bottom or bed underneath the "licker-in" and "picker" cylinders shall be detachable or capable of being swung out of its normal position for the pur-20 pose of cleansing it from the fur or dag which is constantly accumulating and clogging up the space between said cylinders and the bottom or bed; also to afford better facilities for cleaning the cylinders or repairing the pick-25 ing or throwing points; and with these ends in view my invention consists in so attaching said bottom to the machine that it may be detached wholly or swung sufficiently from its

In order that those skilled in the art to which my invention appertains may understand more fully how to make and use my improvement, I will proceed to describe the same in detail, referring by letters to the accompanying drawings, forming a part of this specification, in

normal position to accomplish the purposes of

fully explained, and specifically designated by

30 my invention, all of which will be hereinafter.

Figure 1 is a plan view of the licker-in and picker cylinders; Fig. 2, a detail perspective of my improvement, showing a modified manner of attaching to the machine by means of lugs at the ends; and Fig. 3, a central vertical section illustrating my invention as applied beneath the licker-in and picker cylinders by means of a hinge-connection with the frame of the machine proper, and also showing the same in dotted lines swung down out of nor-50 mal position.

Similar letters denote like parts in the several figures of the drawings.

A is the licker-in cylinder, and B the picker. It is not deemed necessary to enter into any detailed description of the machine itself, as 55 the operation and functions of the several parts are not of the essence of my invention. In machines of this description great difficulty has been experienced in keeping the space between the said cylinders free from 60 particles of fur and "dags," and it very frequently happens that said space becomes so clogged that a great hinderance to the rotation of the cylinders is presented, and the fur is not thrown off uniformly and regularly; also, 65 the fur collects in said space in masses or tufts called "dags," which, when it is blown out by the present process of cleansing the space, forms rough and irregular surfaces on the hat. My invention is designed to overcome all these 70 difficulties.

As seen at Fig. 3, the bottom C, underneath the cylinders, is hinged at one end to the frame of the machine, and secured at the other in its normal position by means of any ordinary turn-75 button or catch device, D, such as may be readily manipulated when it is desired to let down the bottom for cleansing. I am also enabled to accomplish the same results by forming lugs or projections E at the ends of the 80 bottom, as shown at Fig. 2, and adapting the device to slide within grooves or shelves in the frame of the machine, and I therefore do not wish to be confined to the exact method shown and described of attaching said bot- 85 tom, the gist of my invention resting in the broad idea of a detachable bottom for hat-forming machines.

Having thus described my invention, what I claim as new, and desire to secure by Letters 90 Patent, is—

of my improvement, showing a modified manner of attaching to the machine by means of lugs at the ends; and Fig. 3, a central vertical section illustrating my invention as applied beneath the licker-in and picker cylinders by

2. In a machine for forming hat-bodies, a bottom or bed provided with means for detachably connecting the same to the frame of the machine and underneath the fur-throwing 100

devices, whereby said bed or bottom may be readily cleansed, substantially as hereinbefore

shown and specified.

3. The bed or bottom C, hinged at one end to the frame of the machine underneath the licker-in and picker cylinders, the other end being adapted to be secured in position by any ordinary turn-button or catch, substantially as set forth.

In testimony whereof I affix my signature in 10 presence of two witnesses.

CHARLES LAKE.

Witnesses:

WILLIAM B. CURTIS, A. M. WOOSTER.